IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of **Raith**	)	
	)	PATENT PENDING
Serial No.: **10/780,783**	)	
	)	Examiner: Nguyen H. Ngo
Filed: **February 18, 2004**	)	
	)	Group Art Unit: 2416
For: **Thermal Transmission Control of Wireless Data Modem**	)	
	)	Confirmation No.: 2741
Docket No: **4015-5196**	)	

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]

I hereby certify that this correspondence is being:

☐ deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

☐ transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (571) 273-8300.

_____ _____
Date

This correspondence is being:

☒ electronically submitted via EFS-Web

ARGUMENTS PRESENTED FOR PRE-APPEAL BRIEF REQUEST FOR REVIEW

In response to the Final Office Action (FOA) mailed 15 October 2008, the applicants submit the following remarks in support of a Pre-Appeal Brief being filed concurrently with a Notice of Appeal. As this paper is timely submitted with respect to the pending FOA, and is submitted with a second Notice of Appeal (the first was filed 7 January 2008), no fees should be required for its entry. However, please charge any required fees to Deposit Account No. 18-1167.

Pending claims 42 – 55, of which 42 and 53 are independent, all require modifying a transmit power level and a transmission data rate for a wireless device responsive to a measured temperature of the wireless device. Claims 42 – 55 stand finally rejected as obvious under §103 over the combination of Funk (US6168884) and Kleider (US6084919). In particular, the examiner asserts that Funk teaches using power reduction or transmission data rate adjustment to reduce the temperature of a mobile device, but fails to teach using both to reduce the temperature of the

device. Because Kleider teaches both power reduction and data rate adjustment, the examiner concludes it would be obvious to modify Funk to use both power reduction and transmission data rate adjustment to reduce the temperature of a mobile device. As discussed below, however, this obviousness rejection is based on factually incorrect assertions and lacks sufficient motivation for combining the references.

Funk is directed to a temperature reduction process for mobile devices operating according to the Cellular Digital Packet DATA (CDPD) standard implemented as an overlay on top of the Advanced Mobile Phone Systems (AMPS) standard for cellular communications. See Background and Summary. The invention described by Funk relies on controlling the transmit power during a transmit mode or controlling a Supervisory Audio Tone (SAT) during a receive mode. More particularly, if a measured temperature of the mobile device exceeds a threshold, Funk reduces the measured temperature of the mobile device by either inserting brief transmission pauses in the SAT during the receive mode, or by reducing the transmit power during the transmit mode. See Summary.

In the examiner's reading of Funk, the insertion of transmission pauses into an SAT represents a data rate adjustment. This position is a critical part of the obviousness rejection. However, the SAT is not a data signal, and therefore, does not have a data rate. Instead, as well understood by those skilled in the art, the SAT is a continuous tone transmitted by an AMPS device and monitored by a remote device for presence. If the remote device fails to detect the SAT for a predetermined time, the connection between the mobile device and the remote device is terminated (SAT time-out). Funk teaches that the temperature of an AMPS transmitter can be reduced by briefly suspending (pausing) SAT transmission for time instances shorter than the SAT time-out. See col. 4, ll. 29 – 60. Because the SAT is a non-data tone, manipulating the SAT cannot be construed as manipulating a data rate. Further, inserting pauses into a continuous tone

(i.e., the SAT) simply changes the fraction of the time that the continuous tone is active, and thus, represents a change in duty cycle, not data rate.

Funk also directly contradicts the examiner's position that the mobile radio device changes a data transmission rate. Funk explicitly teaches only pausing the SAT transmission during a receive mode. See Abstract (second to last sentence); col. 2, lines 53-57; col. 4, lines 48-60; and independent claims 1 and 9 of Funk, which stipulate pausing only during the receive mode. Put simply, in a receive mode, Funk's mobile radio device does not transmit any data, and therefore by definition cannot modify data transmission rates.

The applicants also note that standards defining the AMPS system described by Funk appear to require a fixed data transmission rate. Per the CDPD System Specification, Release 1.1 (Copyright 1995, CDPD Forum, Inc.), data transmission in CDPD systems like those described in Funk appear to use a fixed, 19.2 Kbps channel. See Section 4.5 on p. 401-9 of the section of the CDPD specification included with the response dated 1 August 2008. If, as appears to be the case, the CDPD systems of interest in Funk do not support variable data transmission rates, then the examiner has no basis for arguing that Funk teaches modifying a data transmission rate. In other words, if the data transmission systems of interest in Funk (AMPS overlaid with CDPD) do not support variable data transmission rates, then the examiner cannot conclude that Funk teaches modifying a data transmission rate. Further, for this same reason, the examiner cannot conclude it would be obvious to modify Funk to include data transmission rate variability for any purpose, much less the purpose at issue in the rejected claims.

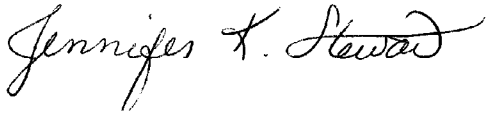
The above remarks illustrate how Funk directly contradicts a critical element of the pending obviousness rejection (i.e., that Funk teaches data transmission rate adjustment as a basis for controlling the temperature of a mobile device). As this factually incorrect position is critical to the pending obviousness rejection, the applicants request reconsideration and withdrawal of the obviousness rejections.

The applicants also note there is no motivation to combine Kleider with Funk. Kleider describes a transmitter that adapts transmission parameters (i.e., transmit power, processing gain, and data rate) based on the spectral profile of a channel, which may be updated to reflect changing channel conditions. This enables Kleider's system to determine appropriate transmit parameters for achieving a predetermined performance in light of the spectral environment in the channel. See Abstract and Summary. Kleider does not include any teachings related to controlling the temperature of a wireless device, or even any mention that temperature could or would be considered when adjusting transmission parameters. Given that Kleider's spectral environment-based teachings have nothing to do with Funk's temperature-based teachings, the examiner appears to combine Kleider with Funk merely for Kleider's mention that data rate and power are among the transmit parameters that may be adapted, and not because Kleider has any real relevance to the teachings of Funk. Because the teachings of Kleider (adapting to a changing spectral environment) are irrelevant to the teachings of Funk (controlling a mobile device temperature), there is no motivation for combining Kleider with Funk.

In light of the above remarks, the applicants submit that the pending claims are patentably distinct from the cited art, and respectfully request that the Panel reconsider and withdraw all pending rejections.

Respectfully submitted,

COATS & BENNETT, P.L.L.C.



Dated: 15 January 2009

Jennifer K. Stewart
Registration No.: 53,639

1400 Crescent Green, Suite 300
Cary, NC 27518

Telephone: (919) 854-1844
Facsimile: (919) 854-2084